

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on page 2, line 28 it recited Fig. 3 sows a replay unit, sows should change to shows. On page 3, line 26 of specification recited “the invention applies to other types of stream them MPEG streams as well”, it’s unclear what is meant by this.

Appropriate correction is required.

Information Disclosure Statement

2. Examiner noticed that there was a cover sheet filed for IDS, however, there wasn't any reference specified.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6 and 9 are rejected under 35 U.S.C. 101 because the method steps of claim 1-6 do not result in any tangible real-world utility. Claim 9 is directed to neither a “process” nor a “machine,” but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only, see MPEP 2173.05 (p) II.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 recited "...independent of the frames other than that particular frame." which is not clear what that would mean. Claim 9 recited "a transmitter apparatus (10) arranged to perform the method of claim 1" which claims both an apparatus and the method steps of using the apparatus is indefinite and has lack of useful utility.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-5, 7 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Chu et al. (US 7,133,362).

8. With respect to claim 1, Chu et al. teaches that a method of processing information that encodes a video stream (20) of image frames (**encode a video stream, col. 2, line 36**), the video stream comprising mutually interspersed first and second subsets of the image frames (**send periodic key frames, and a series of delta**

frames, col.2, lines 38-39), the method comprising encrypting the information for the image frames of the first subset; producing a stream that contains, interspersed with one another, the information for the first subset in encrypted form (**each delta frame is encrypted, col.2, line 42**) and the information for the image frames (22, 24) of the second subset at least partly in plain form (**Each of the key frames contains all data necessary to construct an entire frame image, col. 2, lines40-42).**

9. With respect to claim 2, Chu et al. teaches that selected parts of the second subset that enable access to the stream for the purpose of trick play are in unencrypted form (**Each of the key frames contains all data necessary to construct an entire frame image, col. 2, lines40-42).**

10. With respect to claim 3, Chu et al. teaches that the information encodes each particular frame of the second subset independent of the frames other than that particular frame (**Each of the key frames contains all data necessary to construct an entire frame image, col. 2, lines40-42).**

11. With respect to claim 4, Chu et al. teaches that the stream contains packets, information from at least a particular frame (**A conventional video stream is compressed to contain key frames at periodic intervals, such as one key frame every eight seconds. A string of delta frames is generated at a faster rate after each key frame, such as one every one-tenth of a second, col.8, lines3-8**) being distributed over a plurality of the packets (**a video data stream includes sequential image frames which are packetized for sending, col. 2, lines 32-33**), the information being in unencrypted form (**key frames, col. 2, lines 41-43**) in a first one of the plurality

of the packets that contains a start of the particular frame, subsequent packets of the plurality containing at least part of a remainder of the information from the particular frame in encrypted form (**each delta frame is encrypted, col.2, line 42**).

12. With respect to claim 5, Chu et al. teaches that the information from the particular frame is in unencrypted form in a final one of the plurality of the packets that contains information from the particular frame (**Each of the key frames contains all data needed to construct an entire frame image, but each of the delta frames is encrypted to contain data representing only image changes relative to the immediately preceding frame (key or delta), col. 7, line 66 through col. 8, line3**).

13. With respect to claim 7, Chu et al. teaches a reception and replay apparatus (12) (**Fig. 1**) for receiving a stream that contains packets with information that encodes a stream of image frames (**encode a video stream, col. 2, line 36**), partly in encrypted form (**each delta frame is encrypted, col.2, line 42**), the apparatus comprising a reception unit (120) for receiving the packets (**a newly arriving video frame packet K or D is received from a sender, col.8, line**); storage unit (122) for storing packets received by the reception unit (**Hard disk drive, Fig. 2**); a detection unit (124) (**computer in fig.1**) for detecting for each particular packet whether packet is in unencrypted form and storing a pointer to the particular packet conditional on detection that the particular packet is in unencrypted form; a retrieval unit (126) (**computer in fig.1**) for controlling selective retrieval of the particular packet from the storage unit under control of the pointer.

14. With respect to claim 9, Chu et al. teaches a transmitter apparatus(10) arranged to perform the method of claim 1(**computer in fig. 1**).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu et al. (US 7,133,362) in view of Asano (EP 1 122 728).

17. With respect to claim 6, Chu et al. doesn't teach that selecting the information for the image frames of the second subset, and producing a separate trickplay stream that contains the selected frames. However, Asano teaches the recording medium according to the present invention, enciphered contents information is recorded as it is and furthermore it is possible to finely control trick plays of contents information recorded par. 172. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine teachings of Chu et al. with teachings of Asano to finely control trick plays of the selected frames.

18. With respect to claim 8, Asano teaches that the detection unit (124) is arranged to process information from the packets that are received in unencrypted form to determine whether the packet contains a start or end of a frame and to store the pointer conditional on said determination, assign packet containing first byte of sequence-header-code to read start point of i picture data at the time of random accessing fig.12, s 34. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine teachings of Chu et al. with teachings of Asano to ensure trick play can be perform without any delay.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHAHROUZ YOUSEFI whose telephone number is (571)270-3558. The examiner can normally be reached on Mon-Fri 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Robertson can be reached on (571) 272-4186. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

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